

2010 STRATEGIC INITIATIVE FOR ECONOMIC GROWTH

A recently commissioned research report by Dr. Mark Parry, of UMKC Bloch School, identifies some startling facts about Missouri's highly ranked research capacity, Missouri's lower ranked entrepreneurship levels, and Missouri's declining ability to attract equity/risk capital. While this is not unique to Missouri, over the past decade, other midwestern states have recognized their own weaknesses and begun to proactively address these commercialization gaps. These efforts have fostered their state's economic growth, have lured Missouri entrepreneurs and companies away, and precipitated the relative decline of Missouri's competitive position.

Building a competitive tech-led economy requires a number of variables. Missouri has some advantages over other states in the Midwest - namely its ability to attract talented researchers who in turn have competed and won large amounts of federal research dollars. Missouri, by most indicators and studies, has unfortunately not been able to optimize these assets in the most recent past, by converting research into commercilization (i.e. new businesses, jobs). In order to grow high wage jobs in Missouri, we must recognize the these challenges and overcome them.

CHALLENGES IN MISSOURI

Bringing innovations to market is not something that happens easily in Missouri—or very many places—for a number of reasons. First, university-developed technologies often require that additional work be conducted to determine whether the technology has commercial potential, but there is little funding available for such proof-of-concept activities. In most regions of the country, and particularly in risk-averse traditional economies, it is difficult to find funding to advance the commercialization of technology. To commercialize University system owned-IP at the highest value—and sometimes to license it at all—it is commonly necessary to perform additional studies, sometimes involving animal trials or, in the case of engineering discoveries, a working prototype. Often, it is also necessary to surround the original discovery with additional patents and protections. This kind of work is usually conducted by faculty members (although sometimes by outside consultants) but at the direction of the professional staff in the university licensing office. Innovations are almost never fundable through conventional, peer-reviewed federal programs and, if innovation is to take place at all, it must be separately funded under a different set of criteria focused mainly on economic development.

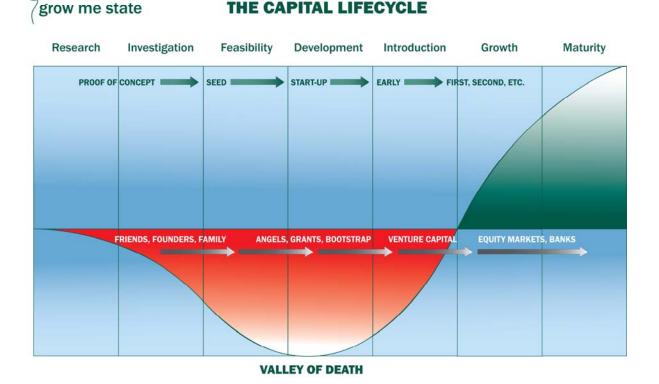
Second, even if commercial potential can be demonstrated, investors and customers are often unwilling to assume the risk that is associated with new technology and small businesses. While

these new companies are often the most innovative, they generally lack the financial resources necessary to identify and promote new technologies.

Today, more and more universities and state institutions are directly involved in business start-ups and commercialization. They are taking an active role in seeking out entrepreneurs and companies as partners and, in some cases, spinning off new companies. Programs have been started throughout the public sector to help researchers and entrepreneurs transform ideas or innovations into products ready for manufacturing, marketing and distribution. Such programs assist inventors and entrepreneurs with patent applications, engineering and testing and development of business and marketing plans. Incubators are an example of how Missouri has succeeded in creating economic impact from State investment. Incubators link entrepreneurs with sources of business and management expertise and help them access capital by linking firms with sources of risk capital, including both angel investors and venture capital funds, or by providing capital directly.

KEY SUCCESS FACTORS

According to a recent Kauffman Foundation research report, managers of commercialization programs say that having sources of flexible funding, or capital formation, is a key factor in being able to move technology into the marketplace. This is true of entrepreneurs as well. As discussed above, there are few, if any, sources of very early-stage funding to assess the commercial potential of a new discovery, or overcome proof-of-concept obstacles. A small amount of funding that does not require a repayment is usually needed to conduct testing, to validate the technology and to determine whether it meets a market need at a competitive price.



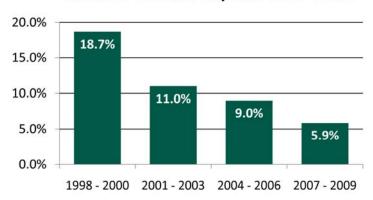
CAPITAL FORMATION:

Funding for Missouri-based start-up companies

The report also discovered one startling finding. Despite the dramatic **increase** of venture capital (VC) funds physically located in Missouri, there has been a **downward** trend of venture investment into Missouri's entrepreneurial firms over the past twelve years. This is an indicator that Missouri is not growing enough new technology start-ups and not maturing existing ones to the next level of growth - to attract venture capital investors.

From 1998 to 2000 the Midwest was attracting roughly 6% of all venture capital invested in the U.S., and Missouri was attracting nearly 19% of all VC invested in the Midwest. It has been dramatically decreasing since then. Missouri's share of the Midwest is now lower than 6%, and Missouri's portion of national VC decreased over the past twelve years to *0.21% the U.S total*.

Decline in Missouri Portion of Midwest Venture Capital: 1998 - 2009

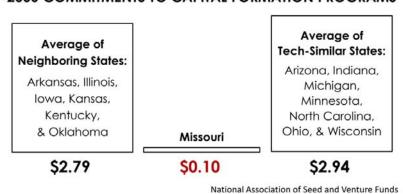


■ Missouri Percentage of Midwest Venture Capital

WHAT OTHER STATES ARE DOING

The report also shows where Missouri stands compared to other states with capital formation programs, based on 2006 data available. States geographically surrounding Missouri, or "Neighboring States," spend an average of \$2.79 per capita on capital formation programs. States identified as being technologically similar to Missouri, or "Tech-Similar States," spend an average of \$2.94 per

2006 COMMITMENTS TO CAPITAL FORMATION PROGRAMS



capita on capital formation. In stark contrast, Missouri only spends 10¢ per capita on these programs.

These numbers illustrate the severity of the delta between what Missouri does in Capital formation to prepare companies for venture capital, and the other states. The Grow Me State Initiative proposes to work towards

being equal and competitive with surrounging and tech-similar states. However, the longer this gap continues, the more companies that will leave Missouri and grow jobs in other states.

GROW ME STATE RECOMMENDATIONS FOR CONSIDERATION

The Grow Me State Initiative recommends employing the proven programs of the states around us and managed by the Missouri Technology Corporation to provide Missouri-based, high-tech, start-up companies with direct pre-seed and seed financing and early stage risk capital to stimulate additional investments from private sources.

ANGEL CAPITAL TAX CREDIT

To encourage more private investment into high tech start-ups, the **Missouri Angel Tax Credit** would create a tax credit for accredited investors and certain partnerships that invest cash or cash equivalents at an arm's length in a qualified small business (as defined by the Small Business Act).

"PROOF OF CONCEPT" LOAN PROGRAM

The Proof of Concept program would be designed to help advanced technology companies with high-growth potential reach their next stage of business funding. Awards of \$50,000 each would be available annually in the form of forgivable loans. Some companies will fail, but most will succeed. When they do, companies are required to repay the loan within five years, with a **minimum repayment of two times the original amount of the loan**. These paybacks will be rolled back into the program for future awards, enabling the program to become self-funding. Companies **must also leverage one dollar of private investment for every dollar of state financial assistance**.

SEED CAPITAL CO-INVESTMENT REVOLVING FUND

A **Seed Capital Co-Investment Revolving Fund** is easily modeled after other successful investment matching programs nationwide. It is primarily focused entrepreneurial, advanced technology companies with strong management teams, well-protected IP, and break-through solutions that provide/serve large, well-understood markets. Companies will meet the following criteria:

- 50 percent of employees and/or assets resident in Missouri
- Seed or start-up stage
- Innovative products and services
- Scalable solution that satisfies large markets
- Solid financial position with no significant outside debt or other negative conditions

Companies must demonstrate that they are potentially attractive to private co-investors, raising a 1:1 match. Economic development factors such as creating jobs with higher than average salaries that stay in Missouri are also important.

Respectfully submitted by Jay DeLong (St. Louis RCGA) on behalf of the Grow Me State Initiative Steering Committee.